We claim:

1. A method for removing structures, which comprises the steps of:

providing a substrate having the structures to be removed;

depositing a sacrifice layer on the structures and the substrate; and

removing the structures and the sacrifice layer in a polishing step.

- 2. The method according to claim 1, which comprises forming the structures from a material selected from the group consisting of noble metals, oxides of noble metals, dielectric materials and ferroelectric materials.
- 3. The method according to claim 1, which comprises forming the structures that must be removed with an aspect ratio of greater than 2.
- 4. The method according to claim 1, which comprises carrying out a chemical mechanical polishing process as the polishing step.

- 5. The method according to claim 1, which comprises forming the sacrifice layer from at least one of a silicon oxide layer and a silicon nitride layer.
- 6. The method according to claim 4, which comprises removing residues of the sacrifice layer by wet chemical processes following the chemical mechanical polishing process.
- 7. The method according to claim 1, which comprises forming the structures that must be removed with an aspect ratio of greater than 4.
- 8. A method for producing at least one structured layer, which comprises the steps of:

providing a substrate;

applying at least one layer to the substrate for structuring;

applying a mask to the layer to be structured;

etching the layer being structured by a dry etching method, so that redepositions of the layer emerge at sidewalls of the mask;

removing the mask;

applying a sacrifice layer; and

performing a polishing step to remove the redepositions of the layer being structured, and to remove the sacrifice layer, so that a structured layer emerges.

- 9. The method according to claim 8, which comprises forming the layer from a material selected from the group consisting of noble metals, an oxide of the noble metals, a dielectric material and a ferroelectric material.
- 10. The method according to claim 8, which comprises interrupting the polishing step and removing residues of the mask.
- 11. The method according to claim 8, which comprises performing a chemical mechanical polishing process as the polishing step.
- 12. The method according to claim 8, which comprises forming the sacrifice layer from at least one of a silicon oxide layer and a silicon nitride layer.